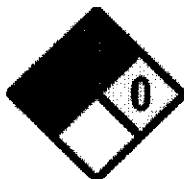


# MSDS IMC Kalium

## Material Safety Data

Esterhazy, Saskatchewan



NFPA CODE	HAZARD RATING SCALE
Blue = Health Red = Fire Yellow = Reactivity White = Other	0 = Least 1 = Slight 2 = Moderate 3 = High 4 = Extreme

EMERGENCY NUMBERS: Transportation (CHEMTREC): 800-424-9300 • Health: 306-345-8400

IDENTIFICATION	SPILLS, LEAKS	TOXICOLOGY
COMPOSITION	STORAGE	ECOLOGY
HEALTH HAZARDS	EXPOSURE	DISPOSAL
FIRST AID	PHYSICAL DATA	TRANSPORTATION
FIRE/EXPLOSION	REACTIVITY	OTHER REGULATIONS

### IDENTIFICATION

PRODUCT NAME — Potash • Potassium Chloride

SYNONYM — Muriate of Potash • Potassium Muriate

CHEMICAL NAME — Potassium Chloride

CHEMICAL FAMILY — Neutral Salt of Alkali Metal

CHEMICAL FORMULA — KCl

MANUFACTURER — Refer to supplier

MATERIAL USES — Fertilizer and Industrial applications



### COMPOSITION

Name	CAS #	Exposure Limits according to ACGIH TLV-TWA (mg/m3)	% by Weight
Potassium chloride	7447-40-7	10	95.0 - 96.0
Sodium chloride	7647-14-5	10	3.1-3.7

*This product may contain up to 0.3 % petroleum based oil or wax (as a dedusting agent) and/or up to 0.03 %*

*aliphatic amine (as an anticaking agent).*



## HEALTH HAZARDS

**POTENTIAL ACUTE HEALTH EFFECTS** —As shipped this product does not present special health hazards. Conditions and work practices which generate dust or fumes should be avoided or controlled. Dust from this product is considered a "nuisance" dust and may cause irritation to skin, eyes and respiratory tract.

### **POTENTIAL CHRONIC HEALTH EFFECTS** —

- Carcinogenic Effects: Not applicable
- Mutagenic Effects: Not applicable
- Teratogenic Effects: Not applicable
- Reproduction Effects: Not applicable



## FIRST AID MEASURES

### **EYE CONTACT** —

Check for and remove any contact lenses. Immediately flush eyes thoroughly with copious amounts of running water, holding eyelids open, for at least 20 minutes. If discomfort or irritation persists, seek medical attention. *Dust may cause eye irritation and stinging sensation. Acts as a foreign body.*

### **SKIN CONTACT** —

Wash exposed area thoroughly with soap or mild detergent and copious amounts of running water. If irritation persists, seek medical attention. *Prolonged contact may cause skin irritation and rashes to susceptible individuals.*

### **INHALATION** —

Remove from exposure area to a ventilated area. If breathing discomfort persists, seek medical attention. *Dust may cause irritation to mucous membranes, upper respiratory tract and lungs.*

### **INGESTION** —

Drink Water. Do not induce vomiting or give a liquid to an unconscious person. Seek medical attention. *Acts as a common salt. Large quantities may cause irritation to the gastrointestinal tract, with nausea, vomiting, epigastric distress, abdominal discomfort and diarrhea.*



---

**FIRE AND EXPLOSION DATA**

THE PRODUCT IS — Non-flammable

AUTO-IGNITION TEMPERATURE — Not applicable

FLASH POINT — Not applicable

FLAMMABLE LIMITS (LEL, UEL) — Not applicable

PRODUCTS OF COMBUSTION — *Not applicable. Product may emit toxic and corrosive forms of chloride at decomposition temperatures.*

FIRE HAZARDS IN PRESENCE OF VARIOUS SUBSTANCES — Not applicable

EXPLOSION HAZARDS IN PRESENCE OF VARIOUS SUBSTANCES —  
Risk of explosion of the product in *presence of mechanical impact*: Not applicable

Risk of explosion of the product in *presence of static discharge*: Not applicable

FIRE FIGHTING MEDIA AND INSTRUCTIONS — Not applicable

SPECIAL REMARKS ON FIRE HAZARDS — No acute hazard. Avoid breathing vapors or fumes.

SPECIAL REMARKS ON EXPLOSION HAZARDS — Potassium chloride: explosive reaction with bromine trifluoride and also the combination of sulfuric acid and potassium permanganate.



---

**ACCIDENTAL RELEASE MEASURES**

SPILL — Sweep up and containerize for reclamation or disposal. Vacuuming or wet sweeping may be used to avoid dust dispersal. Wash area with water; however, avoid contaminating surface water, waterways or sewers leading to surface water. Will damage vegetation if applied in excess.



---

**HANDLING AND STORAGE**

**PRECAUTIONS** — DO NOT ingest. DO NOT breath dust. Avoid generating dust during handling and promote personal hygiene among workers.

**STORAGE** — Store in a dry location away from incompatible substances, strong acids and intense heat.



---

## EXPOSURE CONTROLS

**EXPOSURE LIMIT** — TLV-TWA 10 mg/m<sup>3</sup> from ACGIH for potassium chloride (as nuisance dust). Consult local authorities for acceptable exposure limits.

**VENTILATION** — Provide general and local ventilation as necessary to maintain dust levels below the exposure limit.

**CLOTHING** — Wear appropriate clothing to prevent repeated or prolonged skin contact. Gloves are recommended.

**EYE PROTECTION** — Use safety glasses or goggles to prevent eye contact. An eye wash station should be available for emergency use. Wearing of contact lenses is not recommended when working with the product.

**RESPIRATORY PROTECTION** — Provide respiratory protection (dust mask or dust respirator) for conditions of use where exposure to dust is apparent. For emergencies, a self-contained breathing apparatus may be necessary.



---

## PHYSICAL DATA

**PHYSICAL STATE & APPEARANCE** — Solid (Crystalline or Granulated)

**ODOR** — Odorless

**MOLECULAR WEIGHT** — 74.55

**TASTE** — Strong Saline

**pH (5% soln/water)** — 7 to10

**COLOR** — Pink • Semi-translucent clear/white • White

**BOILING POINT** —1500° C (2732° F) (Sublimes)

CRITICAL TEMPERATURE — Not available

SPECIFIC GRAVITY — 1.988 (Water = 1)

VAPOR PRESSURE — Not available

VAPOR DENSITY — Not available

VOLATILITY — Not available

ODOR THRESHOLD — Not available

WATER/OIL DIST. COEFF. — Not available

IONICITY (in water) — Not available

DISPERSION PROPERTIES — See solubility in water

SOLUBILITY —

- 27g of potash per 100g of water at 0° C
- 34.7 g of potash per 100g of water at 20° C
- 56.7g of potash per 100g of water at 100° C



---

<b>STABILITY &amp; REACTIVITY DATA</b>
----------------------------------------

STABILITY — The product is stable

INSTABILITY TEMPERATURE — Not applicable

CONDITIONS OF INSTABILITY — No additional remarks

INCOMPATIBILITY WITH VARIOUS SUBSTANCES — Avoid contact with strong inorganic acids, strong oxidizing agents and intense heat.

CORROSIVITY — Similar to salt. Mildly corrosive to metals in the presence of moisture.

SPECIAL REMARKS ON REACTIVITY — No additional remarks

SPECIAL REMARKS ON CORROSIVITY — No additional remarks



**TOXICOLOGICAL INFORMATION**

ROUTES OF ENTRY — Ingestion • Inhalation

TOXICITY TO ANIMALS —

ORAL (LD50):

- 383 mg/kg (mouse)
- 2500 mg/kg (Guinea Pig)
- 2600 mg/kg (Rat)

ORAL (LDLO):

- 2430 mg/kg (rat)

EYE (severe):

- 500 mg/24 hr. (Rabbit)

CHRONIC EFFECTS ON HUMANS —

- Carcinogenic Effects: Not applicable
- Mutagenic Effects: Not applicable
- Teratogenic Effects: Not applicable
- Reproduction Effects: Not applicable

OTHER TOXIC EFFECTS ON HUMANS — As shipped this product does not present special health hazards. Conditions and work practices which generate dust or fumes should be avoided or controlled. Dust from this product is considered a "nuisance" dust and may cause irritation to skin, eyes and respiratory tract.

SPECIAL REMARKS ON TOXICITY TO ANIMALS — No additional remarks

SPECIAL REMARKS ON CHRONIC EFFECTS ON HUMANS — Potassium chloride: NIOSH (90-117) does not report target organs effects for potassium chloride. Respiratory diseases may be aggravated by exposure to product dust. Passes through the placental barrier in animals.

SPECIAL REMARKS ON OTHER TOXIC EFFECTS ON HUMANS — No additional remarks

**ECOLOGICAL INFORMATION**

ECOTOXICITY — Not applicable

BOD5 and COD — Not applicable

PRODUCTS OF BIODEGRADATION — Not applicable

TOXICITY OF THE PRODUCTS OF BIODEGRADATION — Not applicable



---

**DISPOSAL CONSIDERATIONS**

WASTE DISPOSAL — Recycle to process if possible. Dispose of waste in compliance with local or regional regulations.



---

**TRANSPORT INFORMATION**

TDG CLASSIFICATION — Not controlled under TDG (Canada)

PIN — Not applicable (PIN and PG)

SPECIAL PROVISIONS FOR TRANSPORT — Not applicable

TDG — (Pictograms)



---

**OTHER REGULATORY INFORMATION**

OTHER REGULATIONS — The product is not listed as a dangerous or hazardous material.

OTHER CLASSIFICATIONS —

- WHMIS (CDN) Not controlled under WHMIS (Canada)
- HCS (U.S.A.) Not controlled under the HCS (United States)
- DSCL (EEC) Not controlled under DSCL (Europe)



WHMIS (CDN) (Pictograms)



DOT (U.S.A.) (Pictograms)



Protective Equipment  
(Pictograms)

*The information in this MSDS was obtained from sources which we believe are accurate and reliable. However, this information is provided without any representation or warranty express or implied, regarding the accuracy or correctness, and we assume no liability resulting from its use. Users should make their own investigations to determine the suitability of the information for their particular purposes.*

IMC Kalium • 2345 Waukegan Road • Suite E-200 • Bannockburn, IL 60015 • Phone: 847-607-3000.  
Revised April, 1997.



Agricultural Products